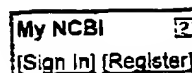




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☐ 1: Biochem Biophys Res Commun. 1983 Oct 14;116(1):341-8.

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**Location and amino acid sequence around the
ADP-ribosylation site in the cholera toxin active subunit A1.**

Lai CY, Xia QC, Salotra PT.

Renatured, S-carboxymethylated subunit A1 of cholera toxin possess the ADP-ribose transferase activity (Lai, et.al., Biochem. Biophys. Res. Commun. 1981, 102, 1021). In the absence of acceptor self ADP-ribosylation of A1 subunit was observed. Stoichiometric incorporation of ADP-ribose moiety was achieved in 20 min at room temperature in a 0.1 - 0.2M PO4(Na) buffer, pH 6.6. On incubation of the complex with polyarginine, 75% of the enzyme-bound ADP-ribose moiety was transferred to the acceptor in 25 min. The ADP-ribosylated A1 was stable at low pH, and on cleavage with BrCN, the ADP-ribose moiety was found associated with peptide Cn I, the COOH-terminal fragment of A1 subunit. On further fragmentation with cathepsin D, a dodecapeptide containing ADP-ribose moiety was isolated whose structure was determined as:
Asp-Glu-Glu-Leu-His-Arg-Gly-Tyr-Arg*-Asp-Arg-Tyr. The Arg* in the peptide was indicated to be the site of ADP-ribosylation.

PMID: 6315008 [PubMed - indexed for MEDLINE]

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